

REMARKS

Claims 1-24 stand rejected as indefinite under 35 U.S.C. § 112 ¶ 2 for failing to particularly point out and distinctly claim the subject matter regarded as the invention. In addition, claims 1-24 stand rejected under 35 U.S.C. § 112 ¶ 1 as failing to comply with the enablement requirement.

Claims 1, 2, 8, and 20 have been amended to clarify the term “field amplifier structure” as originally presented with the term “field amplification structure.” Support for the amendment is found in the specification, the figures, and the common usage of the term “amplification.”

As pointed out by the Examiner, the specification describes “a field amplifier structure [with] at least one of the electrodes for amplifying a field strength of the electric field in the changeover material.” (Original specification, p. 4, lines 24-26).

Figures 3A and 4A illustrate a field amplification structure, where the tip 4 of the field amplification structure “leads to a significant amplification of the electric field E prevailing in the changeover material 2.” (See Original Specification, p. 10, lines 11-15). As illustrated in Figures 3A and 4A, the concentration of electric field lines surrounding the tip region of the field amplification structure is of a higher density (and thus an increased electric field strength) when compared to the concentration of electric field lines away from the tip of the field amplification structure (which illustrate a lower electric field strength). The increased electric field strength near the tip of the field amplification structure leads to an “amplification” as the term is understood in the art (See Webster’s Ninth New Collegiate Dictionary, p. 81- “amplify- to make larger or greater”). The field amplification structure as described in the amended claims does not require the use of active elements, as suggested by the Examiner (Office Action mailed March 22, 2006, p. 2).

Claims 1, 5, 6, and 8 have been amended to clarify the term “changeover material” as “conductivity state changeover material.” Support for the amendment exists in claim 1, the original specification, and the figures. Claim 1 recites “at least two different conductivity states prevailing in the conductivity state changeover

material." The specification describes the characteristics of the conductivity state changeover material with two different conductivity states resulting from an application of an electric field to the material (See Original Specification, pp. 2, line 16- 3, line 16). Specifically, the conductivity state changeover material can "switch back and forth between . . . two conductivity states" based on "programming voltages." (Original Specification, p. 3, lines 6-11).

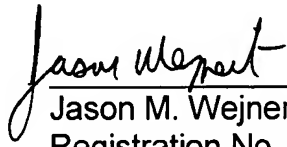
Figure 3C illustrates example conductivity states of the conductivity state changeover material as a function of a forming voltage in the region of the conductivity state changeover material. Figure 3C shows at least two different conductivity states that are allowed by the conductivity state changeover material.

Therefore, because the amended claims 1, 2, 5, 6, 8 and 20 and claims 3-4, 7, 9-19, and 21-24 depending therefrom are described in the specification in such a way as to enable one skilled in the art to make or use the invention, Applicants respectfully request withdrawal of the rejection under 35 U.S.C. § 112 ¶¶ 1-2.

SUMMARY

Pending Claims 1-24 as amended are patentable. Applicant respectfully requests the Examiner grant early allowance of this application. The Examiner is invited to contact the undersigned attorneys for the Applicant via telephone if such communication would expedite this application.

Respectfully submitted,



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